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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,597	04/01/2004	Jean-Pierre Rene Leon	403005/WEINSTEIN	5887
23548	7590	04/04/2006		
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			EXAMINER SHARP, JEFFREY ANDREW	
			ART UNIT 3677	PAPER NUMBER

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,597	Applicant(s) LEON ET AL.	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

[1] This action is responsive to Applicant's remarks/request for continued examination filed on 25 January 2006 with regard to the Official advisory action mailed on 17 January 2006.

Status of Claims

[2] Claims 1-9 are pending.

Response to Arguments/Remarks

[3] Claims 1-7 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Leon et al. WO-00/49299 in view of Higdon et al. US-6,004,065.

Applicant's arguments/remarks with regard to this reference have been fully considered, but are not persuasive.

Leon et al. WO-00/49299 suggest an anti-rotation feature comprising fingers (615) extending from the head (60) of a female piece (6), each of said fingers projecting into a notch (714,715) in the head (71) of a male piece (7), in order to prevent relative rotation between said male (7) and female (6) pieces.

Higdon et al. suggest an anti-rotation feature comprising projecting elements (70) which are axially elastically deformable/deflectable, each having a finger at an end that engages a cutout portion (68) on the head (52) of a male piece, in order to prevent relative rotation between a male piece (50) and female piece (44).

The examiner takes the position that, it would have been obvious to replace the anti-rotation feature taught by Leon et al., with that suggested by Higdon et al., in order to provide an

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improved means for disabling the anti-rotation function.

After further consideration of the claims and prior art of record, the following new grounds of rejection are made.

New Grounds of Rejection

Claim Rejections - 35 USC § 112

[4] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[5] Claim 3 is currently rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what the limitation "into a cutout of the head from edges of the head" (line 3) means. Furthermore, there is insufficient antecedent basis for "the head" (line 3), as there are two "heads" -- a female piece head, and a male piece head. The claim has been treated as it is definite.

Claim Rejections - 35 USC § 102

[6] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[7] Claims 1-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mita et al. US-6,206,606.

In short, and in its broadest sense, Mita et al. teaches a fastening device comprising:

a female piece (2) comprising a clasp (7) having a hollow (i.e., having a bore therethrough) head (2a) "capable" of elastic deformation in an axial direction, and further having a C-shaped profile (@ bend 7, around R), a base wall (1), and bent edges (tops of 8, 9) roughly parallel to the base wall (1) which delimit a space for receiving an immobilizing element (15); said female piece (2) further comprising a hollow foot portion (2b,2c) having two tabs (10) which can be engaged in holes (H) of a stack of panels (P), and which is able to move between an insertion position and a separated position for holding;

a male piece (3) having an immobilizing element (15), a head (3a,13), a shaft (3b) with cross-section in the form of a cam (17) which can be inserted into said clasp (7), said shaft (3b) engaging between the tabs (10) between an angular position of non-separation of the tabs (Figure 9C) and a separation of the tabs (Figure 9A, Figure 8); said male piece further comprising a means for preventing premature rotation having at least one component (8,9) projecting from the head (2a) of the female piece (2) and a notch (recess under 15) in the head (3a,13) of the male piece (3), for receiving said component (8,9); wherein the component (8,9) comprises a finger (pointed end of 8) which can be "moved" (e.g., rotationally relative to the male piece) by intentional action between a position of engagement within said notch (Figure 9C), and

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disengagement from said notch (Figures 9A, 9B); said male piece having portions/at least one lateral protuberance (sidewall of 15) projecting in the radial direction, which pass through a hollow in the head (2a) of the female piece (2), said hollow being formed by said space delimited by said bent edges (tops of 8, 9).

It is to be noted that plastic materials have a yield strength and that elastic deformation can and will occur at stresses below said yield strength. Therefore, each portion of the fastening device taught by Mita et al. is inherently "capable of" at least some elastic deformation in an axial direction. Applicant does not expressly claim an "inclined" finger which is configured to "deflect" into a plane of the female head, but merely states that it may be broadly "moved" (herein)

Applicant is reminded that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

[8] Claims 1, and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Leon et al. WO-00/49299.

In short, and in its broadest sense, Leon et al. teaches a fastening device comprising:
a female piece (8) comprising a clasp having a head capable of elastic deformation in an axial direction (shown in Figure 7), and further having a C-shaped profile (at edges of said head), a base wall (601), and bent edges (602) roughly parallel to the base wall, which delimit a space (84) for receiving an immobilizing element (72,73) of a male piece; said female piece (8) further

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comprising a hollow foot portion (63,65) having two tabs (63a,65a) which can be engaged in holes of a stack of panels (3,4), and which is able to move between an insertion position (Figure 6) and a separated position (Figure 7) for holding;

a male piece (7) having an immobilizing element (72,73) connected to a head (71) via an intermediate shaft (70) with cross-section in the form of a cam (74) which can be inserted into said clasp, said shaft (70) engaging between the tabs (63a,65a) between an angular position of non-separation of the tabs (Figure 6, Figure 8) and a separation of the tabs (Figure 7); said male piece (7) further comprising a means for preventing premature rotation having at least one component projecting from the head of the female piece (8) and a notch (714, 715) in the head (71) of the male piece (7), for receiving said component; wherein the component comprises a finger (615) which can be "moved" (axially by deforming the head of the female piece 8) by intentional action between a position of engagement within said notch (Figures 6 and 7) and disengagement from said notch (Figure 8), by a force acting on the finger in the axial direction of the device; said immobilizing element (72,73) of the male piece (7) comprising portions/at least one or two lateral protuberance(s) (72,73) projecting in the radial direction, which pass through a hollow in the head of the female piece (8) into cutouts (612,613), said hollow being formed by space delimited by said bent edges (602).

Claim Rejections - 35 USC § 103

[9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

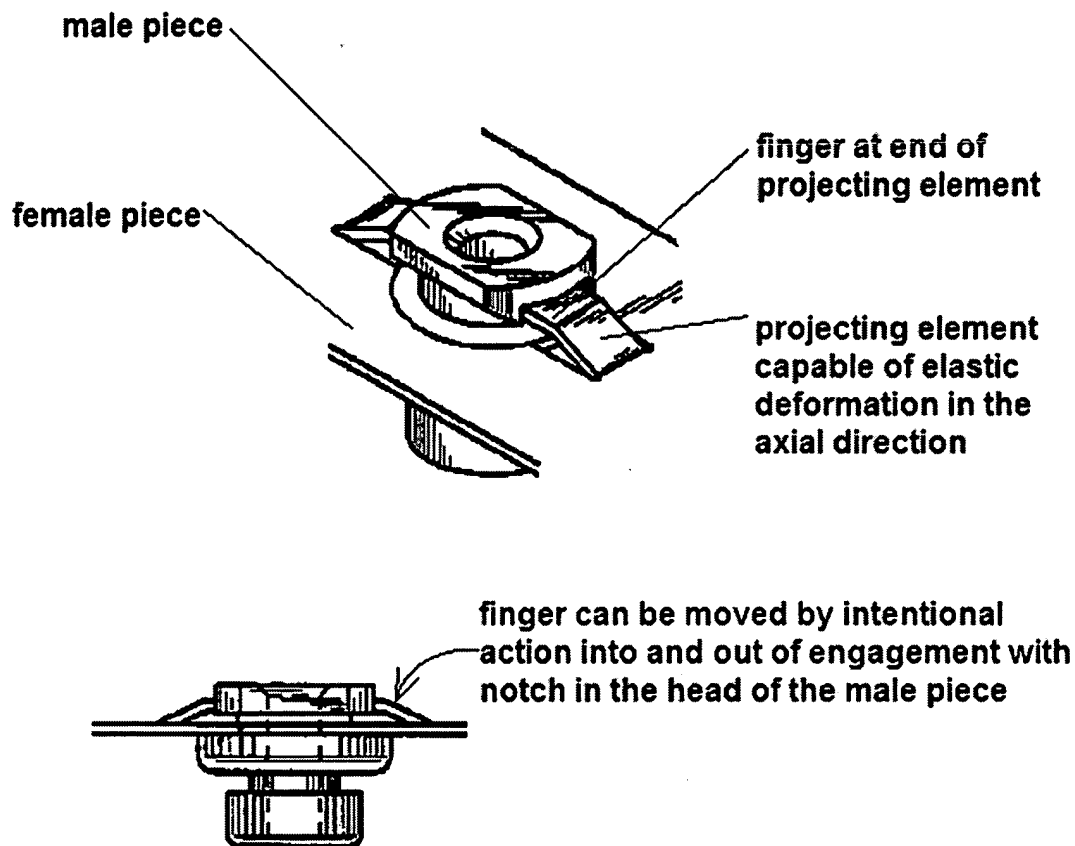
[10] Claims 2 and 3 (as it is understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Leon et al WO-00/49299 in view of Higdon et al. US-6,004,065.

In short, Leon et al. substantially teach each and every claim limitation as discussed above, including what could broadly be construed as a finger (615) which may be "moved" in an axial direction during a compression of the head of the female piece (8); however, Leon et al. fail to disclose expressly, the finger more specifically being ***arranged at the end of a projecting element*** capable of elastic deformation in an axial direction.

Higdon et al. suggest a fastening device having an anti-rotational component (70) projecting from a female piece (30) and into/out of engagement with a notch (68) formed in a male piece (50), said component (70) comprising ***resilient, axially deflectable projections and fingers at each of their free ends***. The fingers (70) are deflectable in an axial direction with respect to the shaft (54,60) axis of the male piece (50), and engage a notch (68) in the head (52) of the male piece (50), so as to prevent accidental rotation of the male piece (50) within the female piece (30). Accidental rotation of the male piece (50) is undesirable (as stated by Applicant in vibration environments), because it threatens the "holding together a stack of panels". In order to achieve an *unlocked* position (i.e., position which allows rotation of the male piece (50) within the female piece 30), the fingers (70) are axially deflected in between the two head portions (52, 56) and out of the notch (68) of the head (52) of the male piece (50). This is facilitated by cutouts (66), as Higdon et al. specifically disclose that clearance flats (i.e.,

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"cutouts") are necessary for the first head portion (52) to clear the fingers (70) upon axial insertion of the male piece (50) into the female piece (30). See Higdon et al. Col 3 lines 26-38.



Higdon et al. US-6,004,065

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the finger component (615) of the device taught by Leon et al., to be situated at the end of a projecting element as suggested by Higdon et al., in order to better prevent accidental rotation of the male piece within the female piece when the male piece is in a fully inserted position, due to a more "positive locking", yet "releasable" construction. It would have

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further advantageous to employ the projecting element found in Higdon et al.'s component, because it provides a spring force that biases the finger into the notch, further ensuring no accidental relative rotation between male and female pieces. Accidental rotation would undesirably cause loosening or separation of the panels.

Allowable subject matter

[11] It appears the prior art of record does not teach the particular structure of the "projecting element" and "finger" as illustrated in the present drawings.

Conclusion

[12] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

See form PTO-892

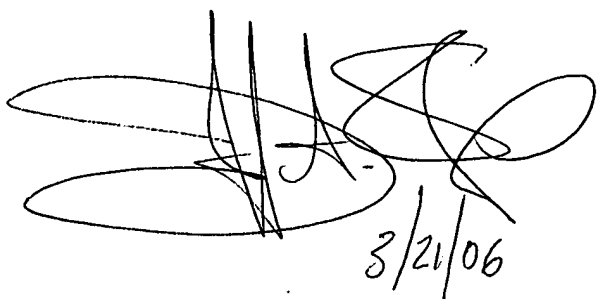
[13] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



3/21/06



ROBERT J. SANDY
PRIMARY EXAMINER